



UNITED STATES PATENT AND TRADEMARK OFFICE

UNITED STATES DEPARTMENT OF COMMERCE
United States Patent and Trademark Office
Address: COMMISSIONER FOR PATENTS
P.O. Box 1450
Alexandria, Virginia 22313-1450
www.uspto.gov

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
-----------------	-------------	----------------------	---------------------	------------------

10/648,673

08/26/2003

Ding-Yu Chung

FA0956USNA

3907

23906

7590

12/04/2006

E I DU PONT DE NEMOURS AND COMPANY
LEGAL PATENT RECORDS CENTER
BARLEY MILL PLAZA 25/1128
4417 LANCASTER PIKE
WILMINGTON, DE 19805

EXAMINER

MAYEKAR, KISHOR

ART UNIT

PAPER NUMBER

1753

DATE MAILED: 12/04/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

10/648,673

Applicant(s)

CHUNG, DING-YU

Examiner

Kishor Mayekar

Art Unit

1753

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 26 May 2006.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) 16 is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-15 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
- ☐ Certified copies of the priority documents have been received.
 - ☐ Certified copies of the priority documents have been received in Application No. _____.
 - ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- ☒ Notice of References Cited (PTO-892)
- ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- ☒ Information Disclosure Statement(s) (PTO/SB/08)
Paper No(s)/Mail Date 03/05 & 05/06.
- ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____.
- ☐ Notice of Informal Patent Application
- ☐ Other: _____.

DETAILED ACTION

Election/Restrictions

1. Restriction to one of the following inventions is required under 35 U.S.C. 121:
 - I. Claims 1-15, drawn to an electrocoating process, classified in class 204, subclass 471+.
 - II. Claim 16, drawn to a coated product, classified in class 428, subclass 622=.

The inventions are distinct, each from the other because of the following reasons:

2. Inventions of Groups I and II are related as process of making and product made. The inventions are distinct if either or both of the following can be shown: (1) that the process as claimed can be used to make another and materially different product or (2) that the product as claimed can be made by another and materially different process (MPEP § 806.05(f)). In the instant case the product as claimed can be made by a non-electrocoating process.
3. Because these inventions are independent or distinct for the reasons given above and there would be a serious burden on the examiner if restriction is not required because the inventions require a different field of search (see MPEP § 808.02), restriction for examination purposes as indicated is proper.

Art Unit: 1753

4. During a telephone conversation with Attorney H. Fricke on 16 November 2006 a provisional election was made without traverse to prosecute the invention of Group I, claims 1-15. Affirmation of this election must be made by applicant in replying to this Office action. Claim 16 is withdrawn from further consideration by the examiner, 37 CFR 1.142(b), as being drawn to a non-elected invention.

Claim Objections

5. Claims 11 and 12 are objected to because of the following informalities: in claims 11 and 12, it is preferred to replace "the anodic film-forming binder" with --the anionic film-forming binder-- for consistency with the usage in preceding claim 10. Appropriate correction is required.

Claim Rejections - 35 USC § 112

6. The following is a quotation of the second paragraph of 35 U.S.C. 112:

The specification shall conclude with one or more claims particularly pointing out and distinctly claiming the subject matter which the applicant regards as his invention.

7. Claims 4 and 8 are rejected under 35 U.S.C. 112, second paragraph, as being indefinite for failing to particularly point out and distinctly claim the subject matter which applicant regards as the invention.

Art Unit: 1753

In claim 4, the recitation "the cathodic film-forming resin comprises ... a cross-linking agent" with the recitation "the emulsion contains a cathodic film-forming resin, a blocked polyisocyanate cross-linking agent" in claim 3 is confusing as whether the cross-linking agent of the cathodic film-forming resin in claim 4 is different from the cross-linking agent in claim 3.

In claim 8, the recitation "5%" is indefinite because of the undefined percentage, i.e. percentage with respect to weight or volume.

Claim Rejections - 35 USC § 102 and § 103

8. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless -

(b) the invention was patented or described in a printed publication in this or a foreign country or in public use or on sale in this country, more than one year prior to the date of application for patent in the United States.

9. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Art Unit: 1753

10. Claim 1 is rejected under 35 U.S.C. 102(b) as being anticipated by Suzuki et al. (US 4,259,163). Suzuki's invention is directed to a process for applying anticorrosive coating on an automobile body member. Suzuki discloses that the process comprises the steps of subjecting the whole or lower portion of the body member to a first electrodeposition in an aqueous bath containing a cationic resinous binder, to form a first electrodeposited coating, subsequently subjecting the whole of the body member to a second electrodeposition in an aqueous bath containing an anionic or cationic resin without hardening the first electrodeposited coating, and baking to effect simultaneous hardening of both coatings (see abstract). Since Suzuki discloses all the steps as claimed, Suzuki anticipates the claimed process.

11. Claims 2-9 and 15 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki '163 in view of Bosso et al. (4,101,4856). Suzuki as applied above further discloses that the aqueous bath containing the cationic resinous binder has a solid content of about 10 to 20% by weight and a pH of 5.2 and comprises an organic solvent, pigment, hardener and catalyst (col. 5, lines 4-7 and lines 35-48; and col. 6, lines 26-49). The difference between Suzuki and claims 2 and 15 is the provision of the recited alkyl tin oxide. Bosso shows in a cationic electrodepositable composition the provision of alkyl tin oxide as a catalyst (col. 6, lines 60-64). The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified

Art Unit: 1753

Suzuki's teachings as shown by Bosso because the selection of any known equivalent catalysts to be used in a cationic electrodepositable composition for promoting reaction in the electrodeposited coating would be within the level of ordinary skill in the art.

As to the subject matter of claims 3-7, Suzuki discloses in col. 6, lines 26-49 that the emulsion contains a cathodic film forming resin and an a blocked polyisocyanate cross-linking resin (Adduct B-1065).

As to the subject matter of claim 8, Bosso shows in Example 1, col. 8, lines 53-61 that the cationic electrodepositable composition comprises about 3% of a pigment ($69.7/107.2 + 190 + 23.5 + 1940$). Again, the selection of the amount of pigment in the cationic electrodepositable composition would be within the level of ordinary skill in the art.

12. Claims 10-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Suzuki '163 in view of Applicant's admission. Suzuki as applied above further discloses that the second coat is from an anionic resin as maleic oil series and polybutadiene (col. 5, lines 55-60). The difference between Suzuki and the instant claims is the provision of the recited anionic resin. Applicant discloses in page 11, line 10 through page 12, line 15 the recited anionic resin is known. The subject matter as a whole would have been obvious to one having ordinary skill in the art at the time the invention was made to have modified Suzuki's teachings as admitted by Applicant because the selection of any known equivalent

Art Unit: 1753

anionic resin for the electrodeposition of the second coat would be within the level of ordinary skill in the art.

Conclusion

13. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure. Palaika et al. (US 6,248,225 B1), a reference cited by Applicant, discloses in col. 4, lines 8-11 that the ionic electrodepositable resin is in the form of an aqueous dispersion (an emulsion).

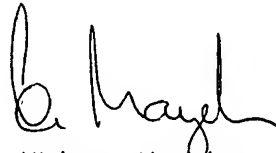
14. Any inquiry concerning this communication or earlier communications from the examiner should be directed to Kishor Mayekar whose telephone number is (571) 272-1339. The examiner can normally be reached on Monday-Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Nam Nguyen can be reached on (571) 272-1342. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on

Art Unit: 1753

access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

A handwritten signature in black ink, appearing to read 'Kishor Mayekar', with a stylized, cursive script.

Kishor Mayekar
Primary Examiner
Art Unit 1753